

**ATTACHMENT SECTION C. 12., a.,b.,c.,d.**

8. **Storage Requirements.**  
Existing and proposed sludge storage facilities must provide an estimated annual sludge balance on a monthly basis incorporating such factors as storage capacity, sludge production and land application schedule. Include pertinent calculations justifying storage requirements.  
Proposed sludge storage facilities must also provide the following information:
- a. A sludge storage site layout on a 7.5 minute topographic quadrangle or other appropriate scaled map to show the following topographic features of the surrounding landscape to a distance of 0.25 mile. Clearly mark the property line.
    - 1) Water wells, abandoned or operating
    - 2) Surface waters
    - 3) Springs
    - 4) Public water supply(s)
    - 5) Sinkholes
    - 6) Underground and/or surface mines
    - 7) Mine pool (or other) surface water discharge points
    - 8) Mining spoil piles and mine dumps
    - 9) Quarry(s)
    - 10) Sand and gravel pits
    - 11) Gas and oil wells
    - 12) Diversion ditch(s)
    - 13) Agricultural drainage ditch(s)
    - 14) Occupied dwellings, including industrial and commercial establishments
    - 15) Landfills or dumps
    - 16) Other unlined impoundments
    - 17) Septic tanks and drainfields
    - 18) Injection wells
    - 19) Rock outcrops
  - b. A topographic map of sufficient detail to clearly show the following information:
    - 1) Maximum and minimum percent slopes
    - 2) Depressions on the site that may collect water
    - 3) Drainageways that may attribute to rainfall run-on to or runoff from this site
    - 4) Portions of the site (if any) which are located with the 100-year floodplain and how the storage facility will be protected from flooding
  - c. Data and specifications for the storage facility lining material.
  - d. Plan and cross-sectional views of the storage facility.
  - e. Depth from the bottom of the storage facility to the seasonal high water table and separation distance to the permanent water table.
9. **Land Area Requirements.** Provide calculations justifying the land area requirements for land application of sewage sludge taking into consideration average soil productivity group, crop(s) to be grown and most limiting factor(s) of the sewage sludge, specifically Plant Available Nitrogen (PAN), Calcium Carbonate Equivalence (CCE), and metal loadings (CPLR sewage sludge only), where applicable. Relate PAN, CCE, and metal loadings to demonstrate the most limiting factor for land application.
10. **Landowner Agreement Forms.** Provide a properly completed Sewage Sludge Application Agreement Form (attached) for each landowner if sewage sludge is to be applied onto land not owned by the applicant.
11. **Ground Water Monitoring.**  
Are any ground water monitoring data available for this land application site?      Yes      No  
If yes, submit the ground water monitoring data with this permit application. Also submit a written description of the well locations, approximate depth to ground water, and the ground water monitoring procedures used to obtain these data.
12. **Land Application Site Information.**  
(Complete Items a-d for sites receiving infrequent application - land application of sewage sludge up to the agronomic rate at a frequency of once in a 3 year period; complete Items a-h for sites receiving frequent application - land application of sewage sludge in excess of 70% the agronomic rate at a frequency greater than once in a 3 year period)
- See Attachment Section C, 12., a., b., c., d.**
- a. Provide a general location map for each county which clearly indicates the location of all the land application sites.
  - b. For each land application site provide a site plan of sufficient detail to clearly show the concerned landscape features and associated buffer zones (See instructions). Provide a legend for each landscape feature and the net acreage for each field taking into account the proposed buffer zones.



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

Ecological Services  
6669 Short Lane  
Gloucester, Virginia 23061



MAR 23 2012

Mr. Dallas L. Phillips  
Environmental Services Manager  
Virginia Department of Corrections  
1001 Obici Industrial Boulevard, Suite F  
Suffolk, Virginia 23434

Re: Southampton/Deerfield Correctional  
Center, Sewage Sludge Application,  
Southampton County, Virginia,  
Project # 2012-I-0438

Dear Mr. Phillips:

The U.S. Fish and Wildlife Service has reviewed the information you provided regarding the referenced project. The following comments are provided under provisions of the Endangered Species Act of 1973 (16 U.S.C. 1531-1544, 87 Stat. 884), as amended and the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d).

Based on the project description and location, it appears that no impacts to federally listed species or designated critical habitat will occur. The National Bald Eagle Management Guidelines dated May 2007 recommend a 660-foot buffer to prevent disturbance to nesting eagles. Your proposed action appears to be outside of the 660 foot radius around the nearest known eagle nest and the U.S. Fish and Wildlife Service believes that your proposed action is not likely to disturb bald eagles. We have no further comments at this time. Should project plans change or if additional information on the distribution of listed species or critical habitat becomes available, this determination may be reconsidered.

Species information and other information regarding project reviews within Virginia are available at [http://www.fws.gov/northeast/virginiafield/endspecies/project\\_reviews.html](http://www.fws.gov/northeast/virginiafield/endspecies/project_reviews.html). If you have any questions, please contact Cindy Kane at (804) 693-6694, extension 117, or via email at [cindy\\_kane@fws.gov](mailto:cindy_kane@fws.gov).

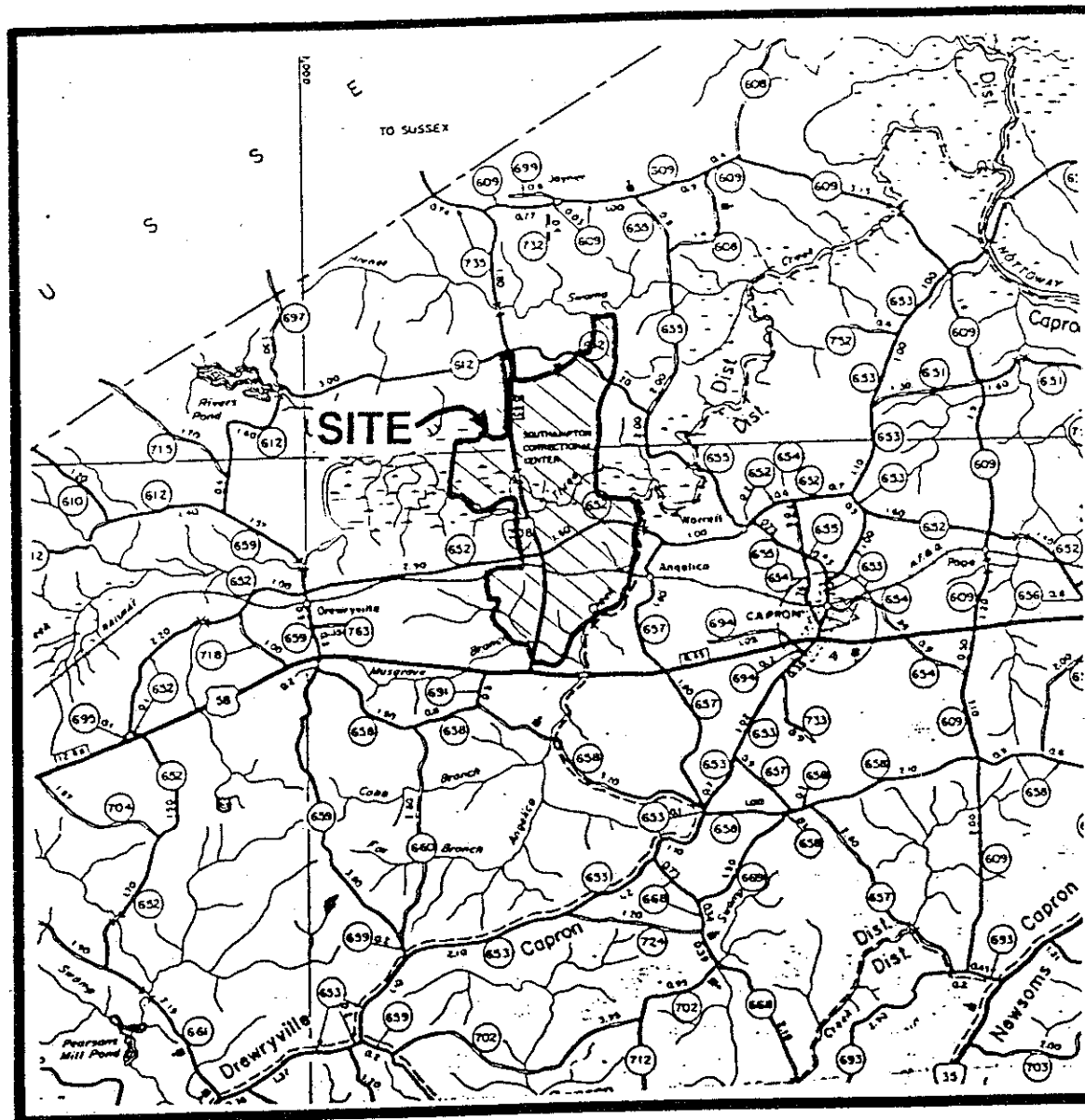
Sincerely,

Cindy Schulz  
Supervisor  
Virginia Field Office

Mr. Phillips

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cc: VDGIF, Richmond, VA (Attn: Amy Ewing)  
VDCR, Richmond, VA (Attn: Rene Hypes)



VDOT GENERAL HIGHWAY MAP  
SOUTHAMPTON COUNTY, VIRGINIA  
SCALE: 1" = 2 MILES

NOTE: ALL LOCATIONS ARE APPROXIMATE.

FIGURE 6  
LOCATION MAP  
DEPARTMENT OF CORRECTIONS  
SOUTHAMPTON STATE FARM  
BIOSOLID PERMIT APPLICATION



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# DESIGNATED BIO – SOLID WASTE FIELDS

<u>KEY</u>	<u>FIELD DESCRIPTION</u>	<u>CROP</u>	<u>ACREAGE</u>	<u>P. H.</u>	<u>RATE</u>	<u>PLANTED ACRES</u>
1	IN FRONT OF DEERFIELD		8.0			
2 & 5	RIGHT ON GARDEN ROAD		20.0			
3	LEFT ON GARDEN ROAD		25.0			
51 P	RED BARN		14.0			
7	17 A – FIELD RT. ON CAPRON HAY FIELD ROAD		17.0			
8	30 A – FIELD BESIDE RECEIVING UNIT		30.0			
9	FIELD BESIDE WORK RELEASE		9.0			
10	20 A – FIELD BESIDE DEERFIELD		20.0			
11 & 26	FIELD ACROSS ROAD 308 FROM FEEDMILL		120.0			
13	77A – FIELD AT WINDMILL		77.0			
15	58 A – FIELD AT WINDMILL		58.0			
16	TURKEY FIELD		18.0			
17	BEHIND 295		9.0			
18	27A – FIELD LEFT ON ROAD TO CAPRON		27.0			
20	NORTH OF AIRSTRIP		10.0			
21	GUM TREE FIELD		39.0			
22	HARRUP LINE FIELD		10.0			
23	5 A – FIELD ON 308		5.0			
28	BEHIND AIRSTRIP		12.0			
30	STRAW SHED FIELD		22.0			
			550 A			